

## 510(k) Summary acc. to 21 CFR 807.92

## **Applicants Name and Address:**

Dräger Medical AG & Co. KG Moislinger Allee 53-55 23542 Lübeck Germany

APR 2 3 2010

#### Manufacturer Name and Address:

Dräger Medical AG & Co. KG Moislinger Allee 53-55 23542 Lübeck Germany

## **Establishment Registration Number:**

9611500

#### Contact Person:

Ulrich Schroeder Director Regulatory & Clinical Affairs

Tel. No.: + 49 (451) 882-3648 Fax No.: + 49 (451) 882-3018

## **Applicants US Contact Person**

Joyce Kilroy Vice President, Processes, Quality & Regulatory

Tel. No.: (215) 660-2626 Fax No.: (215) 721-5424

#### Date submission was prepared:

2010-03-30

#### Device Name:

Common Name: Classification Name:

Infinity MCable - Mainstream CO<sub>2</sub> Carbon dioxide gas analyzer, CCK

Regulation Number:

21 CFR 868.1400

Class:

11



## Legally Marketed Predicate Device to which Substantial Equivalence is claimed:

510(k) number	Trade name	Company
K 051263	Evita XL, Option SmartCare with Option Capno Package CO <sub>2</sub> Mainstream sensor #6871500	Dräger Medical AG & Co. KG
K 042601	CAPNOSTAT 5	RESPIRONICS NOVAMETRIX, INC.

## **Device Description:**

The Infinity MCable – Mainstream  $CO_2$  uses infrared absorption technology to accomplish mainstream  $CO_2$  measurements. The sensor is able to measure end-tidal  $CO_2$  and inspired  $CO_2$  and calculates the respiratory rate. This measurement module is integrated inside the sensor and no longer part of the host device (e.g. ventilator).  $CO_2$  compensation has been advanced for the foreign gases helium and nitrous oxide.

### **Technological Characteristics**

The Infinity MCable – Mainstream  $CO_2$  is based on the same technological principles as the Dräger predicate (specific dual wavelength infrared absorption by  $CO_2$  molecules) using the same wavelengths. Same parameters are measured as  $CO_2$  waveform; end tidal  $CO_2$ ; inspired  $CO_2$  and respiration rate from capnogram as well as the measurement range is identical to the predicate (0 to 100 mmHg). The new Infinity MCable – Mainstream  $CO_2$  Sensor uses the existing legally marketed accessories of the Dräger predicate.

#### Indication for Use:

The Dräger Infinity MCable Mainstream CO<sub>2</sub> sensor is meant to be used for continuous, real time measurement of CO<sub>2</sub> concentrations of ventilated patients from neonates to adults. This sensor is only intended for use with devices made by Dräger Medical, or with devices which are approved for use with Dräger CO<sub>2</sub> components (Dräger-compatible devices)

#### Conclusion:

All modifications have been evaluated for safety and effectiveness.

The summary of the design control activities and the risk analysis show that these types of modifications do not change the device operating principle or mechanism of action. The modifications do not alter the fundamental scientific technology and therefore the safety and effectiveness is substantially equivalent to the legally marketed predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Mr. Ulrich Schroeder Director Regulatory & Clinical Affairs Draeger Medical AG & Company KG 53/55 Moislinger Allee Luebeck Germany D-23542

APR 2 3 2010

Re: K100941

Trade/Device Name: Infinity MCable Regulation Number: 21 CFR 868.1400

Regulation Name: Carbon Dioxide Gas Analyzer

Regulatory Class: II Product Code: CCK Dated: March 31, 2010 Received: April 5, 2010

## Dear Mr. Ulrich Schroeder:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal</u> Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Anthony D. Watson

Wh for

Director

Division of Anesthesiology, General Hospital, Infection Control and General Hospital, Office of Device Evaluation Center for Devices and Radiological Health

# **Indications for Use**

510(k) Number (if	known):			
Device Name:	Infinity MCable			
Indications for Use	e:			
continuous, real ti neonates to adults This sensor is only		tions of ventilated patients from e by Dräger Medical, or with devices		
• .				
Prescription UseX AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)  (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)				
Concurrence of	CDRH, Office of Device Evaluation	on (ODE)		
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510(k) Number:	K100941			